

Nov 18

4.2 Solving addition + subtraction equations

$$\begin{array}{r} x + 6 = 9 \\ \downarrow -6 \quad -6 \\ \boxed{x = 3} \end{array}$$

check ✓

$$\begin{array}{l} x + 6 = 9 \\ 3 + 6 = 9 \\ 9 = 9 \quad \checkmark \end{array}$$

- ① Isolate the variable
- ② Undo operations with opposite operations
addition \rightarrow subtraction
subtraction \rightarrow addition
- ③ What you do on one side of the equal sign, you must do to the other side. BALANCE
- ④ Rewrite original problem. Substitute in the value for the variable.
Complete all the mathematics

$$\begin{array}{r} r - 4 = -2 \\ +4 \quad +4 \\ \hline \end{array}$$

use the rules!

$$r = 2$$

check:

$$\begin{array}{l} r - 4 = -2 \\ 2 - 4 = -2 \\ -2 = -2 \quad \checkmark \end{array}$$